

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,500	12/22/2000	Yuergen Boehmke	00348	9783
45695	7590 12/16/2005		EXAMINER	
WITHERS & KEYS FOR BELL SOUTH P. O. BOX 71355			IQBAL, KHAWAR	
	, GA 30007-1355		ART UNIT	PAPER NUMBER
	,		2686	

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)			
Office Action Summary		09/746,500	BOEHMKE, YUERGEN			
		Examiner	Art Unit			
		Khawar Iqbal	2688			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)[[]	Responsive to communication(s) filed on <u>16 November 2005</u> .					
·	s action is FINAL . 2b) This action is non-final.					
'=	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
٥,۵	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
•						
•	Claim(s) <u>10-16,27-39 and 41</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.					
	5) Claim(s) is/are allowed.					
	·					
	☑ Claim(s) <u>10-16,27-39 and 41</u> is/are rejected. ☑ Claim(s) is/are objected to.					
	Claim(s) are subject to restriction and/o	r election requirement				
ا (۵	ciain(s) are subject to restriction and/o	r election requirement.				
Applicati	on Papers					
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	ınder 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
A44	Wal					
Attachment		Λ. □	(DTO 440)			
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary (Paper No(s)/Mail Da				
3) 🔯 Inforn	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date _ وون _ چ		atent Application (PTO-152)			

Art Unit: 2688

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 10-12,14-16 and 32 are rejected under 35 U.S.C. 102(e) as being unpatentable by Farris et al (6504907).
- 3. Regarding **claim 10** Farris et al teaches a method for communicating all telecommunication call records generated over a period of time associated with a telecommunication system, the call records being transmitted from a remote telecommunication device, comprising (figs. 1-3):

receiving all telecommunication call records from a plurality of remote telecommunication devices at a plurality of switches in communication with a switch master (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9),

transmitting all dial digits from the plurality of switches to the switch master (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9), wherein the switch master is in communication with a computing system (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, col. 13, lines 25-50);

Art Unit: 2688

transmitting all telecommunication call records from the switch master to a the computing system (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, lines 25-50, col. 20, lines 1-20);

storing all telecommunication call records in a database in communication with the computing system (col. 5, lines 16-30, col. 13, lines 25-50, col. 20, lines 1-20);

storing at least one of the telecommunication call records in a table within the database, wherein the table relates to how recently the telecommunication call records were transmitted from the remote telecommunication device (col. 5, lines 16-30, col. 13, lines 25-50, col. 20, lines 1-20); and

searching the database for one or more telecommunication records associated with a telecommunication system (col. 13, lines 25-40, col. 21, line 46-col. 22, line 18, col. 23, lines 1-40).

Regarding **claim 11** Farris et al teaches wherein receiving the one or more call records comprises receiving the one or more call records from a telecommunication switch (col.5, lines 16-30, col. 12, lines 19-50, col. 13, line 61-col. 14, line 9).

Regarding **claim 12** Farris et al teaches wherein transmitting comprises transmitting the one or more call records from the telecommunication switch to the computing system (col.5, lines 16-30, col. 12, lines 19-40, col. 13, lines 25-40).

Regarding **claim 14** Farris et al teaches wherein receiving the one or more call records includes receiving the one or more call records from a wireless device (col. 11, lines 5-15).

Art Unit: 2688

Regarding **claim 15** Farris et al teaches further comprising analyzing the one or more call records received from the telecommunication switch (col.5, lines 16-30, col. 12, lines 19-40, col. 13, lines 25-40).

Regarding **claim 16** Farris et al teaches wherein analyzing the one or more call records comprises parsing the one or more call records (col.5, lines 16-30, col. 12, lines 19-40, col. 13, lines 25-40).

Regarding **claim 32** Farris et al teaches a computer readable medium having a set of computer instructions encoded thereon, comprising (figs. 1-3):

the set of computer instructions being operative with a computer adapted for communicating with a telecommunication system in real time and adapted for communicating with a storage device, the set of computer instructions cause the computer to (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, lines 25-50, col. 20, lines 1-20);

receive all telecommunication call records generated over a period of time from a plurality of telecommunication switches by a switch master in communication with the telecommunication switch substantially instantaneously after termination of at least one telecommunications transaction (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, lines 25-50, col. 20, lines 1-20);

receive all the telecommunication call records from the switch master by the computer in communication therewith in real time relative to the termination of the telecommunications transactions (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, lines 25-50, col. 20, lines 1-20);

store all the telecommunication call records in a storage device (col. 5, lines 16-30, col. 13, lines 25-50, col. 20, lines 1-20);

generate one or more reports based on predetermined criteria in real time relative to the termination of the telecommunications transactions (col. 13, lines 25-40, col. 21, line 46-col. 22, line 18, col. 23, lines 1-40);

store at least one of the telecommunication call records in a table within the storage device, wherein the table relates to how recently the telecommunication call record was received (col. 13, lines 25-40, col. 21, line 46-col. 22, line 18, col. 23, lines 1-40).

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 13,27-31,32-39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farris et al (6504907) and further in view of Lowe et al (6539082).
- 6. Regarding claim 13 Farris et al teaches all limitations as applied to claim 10 furthers Farris et al teaches accounting message-containing data regarding events occurring in processing of call is generated in response to detection of code in service profile for subject stored in switching office. The message is processed, and detailed record of call is formed and delivered to data system of law enforcement agency (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9). Farris et al teaches real

time communication. Farris et al does not specifically states time associated with a telecommunication system in real time.

In an analogous art, Lowe et al teaches time associated with a telecommunication system in real time (col. 2, lines 55-col. 3, line 60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Farris et al by specifically adding feature in order to enhance system performance of the system purpose of producing real-time billing information in a telecommunications network as taught by Lowe et al.

Regarding **claim 27** Farris et al teaches a computer implemented method for managing all call records received over a period of time associated with a telecommunication system in relative to the termination of the telecommunications transactions, the call records being transmitted from a remote telecommunication device, comprising (figs. 1-3):

receiving all digits received over a period of time from a plurality of remote telecommunication devices at a plurality of corresponding switches in communication with a switch master substantially instantaneously after termination of at least one telecommunications transactions (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9);

transmitting all the dial digits received over a period of time from the plurality of switches to the switch master in real time relative to the termination of the telecommunications transactions, wherein the switch master is in communication with at

least a billing system and a computer system (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9);

receiving all the telephone call records from the switch master in relative to the termination of the telecommunications transactions into the computing system (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9);

inputting into the computing system an identifier and generating a report based on the identifier in relative to the termination of a telecommunications transaction (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9). Farris et al teaches accounting message-containing data regarding events occurring in processing of call is generated in response to detection of code in service profile for subject stored in switching office. The message is processed, and detailed record of call is formed and delivered to data system of law enforcement agency. Farris et al teaches real time communication. Farris et al does not specifically teach time associated with a telecommunication system in real time.

In an analogous art, Lowe et al teaches time associated with a telecommunication system in real time (col. 2, lines 55-col. 3, line 60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Farris et al by specifically adding feature in order to enhance system performance of the system purpose of producing real-time billing information in a telecommunications network as taught by Lowe et al.

Regarding **claim 28** Farris et al teaches receiving the one or more telecommunication call records at a telecommunication switch, routing the one or more

telecommunication call records to one or more computers in communication with the computing system; and storing the one or more telecommunication call records in a storage device in communication with the computing system (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, lines 25-50, col. 20, lines 1-20).

Regarding **claim 29** Farris et al teaches downloading one or more sets of computer instructions to the computing system from a server in communication therewith (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, lines 25-50, col. 20, lines 1-20).

Regarding **claim 30** Farris et al teaches wherein receiving the telecommunication call records father comprises receiving telecommunication call records including records selected from the group consisting of an originating telephone number, a telephone number dialed by a subscriber, a voice channel seizure time, a voice channel seizure date, a duration time of a telephone call and a cell location of a telephone call (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, lines 25-50, col. 20, lines 1-20).

Regarding **claims 31** Farris et al teaches wherein generating a report further comprises generating a report based on an identifier selected from the group consisting of a telecommunication device number, a telecommunication device identification number and one or more digits dialed by the telecommunication device (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, lines 25-50, col. 20, lines 1-20).

Regarding **claims 32,33** Farris et al teaches a system for managing all telephone call records in, comprising (figs. 1-3):

Art Unit: 2688

a plurality of telecommunication switches (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9);

a switch master in communication with at least a billing system, a computer system and the plurality of telecommunication switches (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9):

a computing system including one or more computers having one or more processors in communication with the switch master, the computing system including (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9);

one or more storage devices in communication therewith (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9);

a memory coupled to the one or more processors, (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9)one or more storage devices in communication thereto; and one or more sets of computer instructions configured to be executed by the computing system, the one or more sets of computer instructions being operative with the computing system to perform acts selected from the group consisting of setting one or more storage tables to a known state, checking the status of the one or more sets of executing computer instructions, providing a summary of the telecommunication call records, providing an output report based on a telecommunication device number (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9), providing an output report based on a telecommunication device identification number, and providing an output report based on a number of digits dialed by the telecommunication device (col. 5, lines 16-30, col. 12, lines 19-50, col.

13, line 60-col. 14, line 9). Farris et al teaches accounting message-containing data regarding events occurring in processing of call is generated in response to detection of code in service profile for subject stored in switching office. The message is processed, and detailed record of call is formed and delivered to data system of law enforcement agency. Farris et al teaches real time communication. Farris et al does not specifically teach time associated with a telecommunication system in real time.

In an analogous art, Lowe et al teaches time associated with a telecommunication system in real time (col. 2, lines 55-col. 3, line 60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Farris et al by specifically adding feature in order to enhance system performance of the system purpose of producing real-time billing information in a telecommunications network as taught by Lowe et al.

Regarding **claims 34** Farris et al teaches further comprising a server coupled to the computing system (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, lines 25-50, col. 20, lines 1-20).

Regarding **claims 35** Farris et al teaches wherein the computing system provides the telecommunication call records to the server (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, lines 25-50, col. 20, lines 1-20).

Regarding **claims 36** Farris et al teaches wherein the computing system further comprises a plurality of computers interconnected in a network (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, lines 25-50, col. 20, lines 1-20).

Art Unit: 2688

Regarding **claim 37** Farris et al teaches a system for managing all telephone call records in, comprising (figs. 1-3):

a plurality of telecommunication switches (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, lines 25-50, col. 20, lines 1-20);

a switch master in communication with at least a billing system, a computer system and the plurality of telecommunication switches in real time (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, lines 25-50, col. 20, lines 1-20):

a computing system including one or more computers having one or more processors in communication with the switch master (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9), the computing system including; one or more storage devices in communication therewith; a memory coupled to the one or more processors (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9); one or more storage devices in communication thereto', and one or more sets of computer instructions configured to be executed by the computing system, the one or more sets of computer instructions being operative with the computing system to perform acts selected from the group consisting of setting one or more storage tables to a known state, checking the status of the one or more sets of executing computer instructions (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9), providing a real-time summary of the telecommunication call records, providing an output report based on a telecommunication device number, providing an output report based on a telecommunication device identification number, and providing an output report based on a number of digits dialed by the telecommunication device (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9). Farris et al teaches accounting message-containing data regarding events occurring in processing of call is generated in response to detection of code in service profile for subject stored in switching office. The message is processed, and detailed record of call is formed and delivered to data system of law enforcement agency. Farris et al teaches real time communication. Farris et al does not specifically teach time associated with a telecommunication system in real time.

In an analogous art, Lowe et al teaches time associated with a telecommunication system in real time (col. 2, lines 55-col. 3, line 60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Farris et al by specifically adding feature in order to enhance system performance of the system purpose of producing real-time billing information in a telecommunications network as taught by Lowe et al.

Regarding **claims 38** Farris et al teaches further comprising computer server means in communication with the computing system means (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, lines 25-50, col. 20, lines 1-20).

Regarding **claims 39** Farris et al teaches further comprising switch master means in communication with the telecommunication switching means and the computing system means (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, lines 25-50, col. 20, lines 1-20).

Regarding **claim 41** Farris et al teaches a computer implemented method for managing all call records received over a period of time associated with a

telecommunication system in relative to the termination of the telecommunications transactions, the call records being transmitted from a remote telecommunication device, comprising (figs. 1-3):

receiving all digits received over a period of time from a plurality of remote telecommunication devices at a plurality of corresponding switches in communication with a switch master substantially instantaneously after termination of at least one telecommunications transactions (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9);

transmitting all the dial digits received over a period of time from the plurality of switches to the switch master in real time relative to the termination of the telecommunications transactions, wherein the switch master is in communication with at least a billing system and a computer system (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9);

receiving all the telephone call records from the switch master in relative to the termination of the telecommunications transactions into the computing system (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9);

inputting into the computing system an identifier and generating a report based on the identifier in relative to the termination of a telecommunications transaction (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col. 14, line 9). Farris et al teaches accounting message-containing data regarding events occurring in processing of call is generated in response to detection of code in service profile for subject stored in switching office. The message is processed, and detailed record of call is formed and

delivered to data system of law enforcement agency. Farris et al teaches real time communication. Farris et al does not specifically teach time associated with a telecommunication system in real time.

In an analogous art, Lowe et al teaches time associated with a telecommunication system in real time (col. 2, lines 55-col. 3, line 60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Farris et al by specifically adding feature in order to enhance system performance of the system purpose of producing real-time billing information in a telecommunications network as taught by Lowe et al.

Response to Arguments

- 7. Applicant's arguments filed 11/16/2005 have been fully considered but they are not persuasive, therefore rejections to claims 10-16, 27-39, and 41 is maintained.
- 2. In the remarks applicants argued that:

Argument: Farris fails to teach all the recitations of claims.

Response: Farris teaches a method for communicating all telecommunication call records generated over a period of time associated with a telecommunication system, the call records being transmitted from a remote telecommunication device, comprising: receiving all telecommunication call records from a plurality of remote telecommunication devices (11,13, fig 2) at a plurality of switches (17, 19, 20, fig 2) in communication with a switch master (20, fig 2, col. 5, lines 16-30, col. 12, lines 9-50, col. 13, line 60-col. 14, line 9), transmitting all dial digits (11, 13, 14, 15, fig 2, receive dialed digits from 1A-1F, fig 2 and transmits to 17,19,20) from the plurality of switches to

Application/Control Number: 09/746,500 Page 15

Art Unit: 2688

the switch master (20, fig 2, col. 5, lines 16-30, col. 12, lines 19-50, col. 13, line 60-col 14, Line 9), wherein the switch master is in communication with a computing system (TANDEM switch is a central office switch (Telco switch) that connects end offices together and does not deal directly with the customer. Most of the call recording and billing used to be handled by tandem switches, it is also provided in the end offices by the end office switches. A sector tandem switch connects end offices for intraLATA traffic, while an access tandem switch provides the connection between end offices and the POPs for interexchange carriers (IXCs), 22, 37, fig 2, col. 5, lines 16-30, col. 12, lines 19-50, col. 13, col. 13, lines 25-50), transmitting all telecommunication call records from the switch master (20, fig 2) to a the computing system (col. 5, lines 16-30, col. 12, lines 19-50, col. 13, lines 25-50, col. 20, lines 1-20); storing all telecommunication call records in a database (22, fig 2) in communication with the computing system (col. 5, lines 16-30, col. 13, lines 25-50, col. 20, lines 1-20), storing at least one of the telecommunication call records in a table within the database, wierein the table relates (22, fig 2)to how recently the telecommunication call records were transmitted from the remote telecommunication device (col. 5, lines 16-30, col. 13, lines 25-50, col. 20, lines 1-20); and searching the database for one or more telecommunication records associated with a telecommunication system (col. 13, lines 25-40, col. 21, line 46-col. 22, line 18, col. 23, lines 1-40).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Khawar Iqbal whose telephone number is (571) 272-7909.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Art Unit: 2688

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Marsha D Bank-Harold

Page 17

CONTROLA D. BANGALIGATION SULLIMOSONY PARLICH ACCURTER TECHNOLOGY CENTER 2000

Khawar Iqbal